

Fujitsu recommends Windows 8 Pro.

Data Sheet

Fujitsu CELSIUS C620 Workstation

1U of Pure Workstation Performance

If you need maximum workstation performance out of the datacenter, Fujitsu's compact CELSIUS C620 is your choice. The 1U rack-mount workstation sophisticatedly combines high-end graphics and single processor performance at highest density. Thus it is the ideal system for all users of CAx, DCC, Visualization or HPC applications, having only limited space. Full security is ensured by keeping the high-quality CELSIUS C620 in the datacenter.



Density

Space saving workstation

- Full workstation performance packed in only 1U

Performance

Fully concentrate on core activities

- Sophisticated combination of Intel® Xeon® processor and high-end graphics cards ideal for remote CAx or HPC

Best visualization

Full GPU performance out of the datacenter

- Fujitsu CELSIUS C620 e.g. as a node in a render cluster

CELSIUS offering

Different workstations to meet individual needs

- Expands the CELSIUS portfolio to the datacenter

Manageability

Easy manageability saves time and resources

- Onboard gigabit remote management controller (iRMC S3)



Components

Processor	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Xeon® processor E3-1280v2 (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB)
	Intel® Xeon® processor E3-1275v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1270v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB)
	Intel® Xeon® processor E3-1245v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1240v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB)
	Intel® Xeon® processor E3-1230v2 (4 Cores / 8 Threads, 3.30 GHz, up to 3.7 GHz, 8 MB)
	Intel® Xeon® processor E3-1225v2 (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1220v2 (4 Cores / 4 Threads, 3.10 GHz, up to 3.5 GHz, 8 MB)
	Intel® vPro™ with all Intel® Xeon® processors
Operating systems	
Operating system	Windows® 7 Professional 64-bit
	Windows 8 Pro
	Windows 8
Operating system compatible	Windows® XP
	Linux
	Windows® Server 2008 R2
	Windows® Server 2012
Operating system notes	Novell® certification pending
	For some configurations third party drivers are currently not available or configuration restrictions may apply.
	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
	Certified for Red Hat Enterprise Linux
	Certified for SUSE Enterprise Desktop
	Certified for SUSE Enterprise Server
Memory modules	
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
Graphics	
	GPU computing card: NVIDIA® GRID K2 8GB, 8 GB, 3072 cores, PCIe x16
	Ultra-high-end 3D: NVIDIA® Quadro® 6000, 6 GB, 448 cores, PCIe x16, 1x DVI-I, 2x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4000, 3 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2000D, 2 GB, 384 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® 2000D, 1 GB, 192 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® K2000, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: AMD FirePro™ W5000, 2 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: AMD FirePro™ V4900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K600, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: AMD FirePro™ V3900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® 410, 512 MB, 192 cores, PCIe x16, 1x DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS 510, 2 GB, 16 cores, PCIe Gen2 x16, 4x miniDP
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP
Personal Supercomputing	
	Coprocessor: Intel® Xeon Phi™ Coprocessor 5110P, PCIe x16

Hard disk drives (internal)	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10000 rpm, 1000 GB, 2.5-inch, business critical
	HDD SATA III, 10000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7200 rpm, 4000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 3000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch
	HDD SATA II, 7200 rpm, 2000 GB, 3.5-inch, business critical
	HDD SAS, 10000 rpm, 600 GB, 2.5-inch
	HDD SAS, 10000 rpm, 450 GB, 2.5-inch
	HDD SAS, 10000 rpm, 300 GB, 2.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (business critical HDDs required) Up to 20 GB of HDD space is reserved for system recovery
Drives (optional)	DVD SuperMulti SATA slim
SCSI / SAS Controller	RAID Contr BBU Upgrade for RAID 5/6 Ctrl RAID 5/6 Ctrl. 6 Gbit/s 8 ports ext. 512 MB Cache
Interface add on cards/components (optional)	Gigabit Ethernet PCIe x1, DS
	Dual 1 Gigabit Ethernet PCIe x4
	Dual 10 Gigabit Ethernet PCIe x8
Base unit	CELSIUS C620
Mainboard	
Mainboard type	D3188
Formfactor	proprietary
Chipset	Intel® C216
Processor socket	LGA 1155
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3) ECC/non-ECC
Supported capacity RAM (max.)	32 GB
Memory frequency	1600 MHz
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	2x Built-in 10/100/1000 MBit/s Intel® 82579 LM and Intel® 82574L
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
I/O controller on board	
Serial ATA total	5
thereof SATA III	2 (port 0 and 1)

I/O controller on board

Controller functions	Serial ATA II (3 Gbit)
	Serial ATA III (6 Gbit)
	NCQ
	AHCI
	RAID 0/1/5/10 (Windows XP not supported)
	Intel® Smart Response Technology (depending on CPU)
SATA RAID support	0, 1, 10, 5

Interfaces

USB 2.0 total	2
USB 3.0 total	4
USB front	2x 2.0
USB rear	4x 3.0
USB internal	1
VGA	1 (depends on processor, via DVI to VGA adapter)
DVI	1 (depends on processor)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Ethernet (RJ-45)	2

Drive bays

Drive bays total	7
2.5-inch internal bays	4
3.5-inch internal bays	2
5.25-inch external bays	1
Drive bay notes	Up to 4x 2.5-inch HDDs/SSDs (cold plug) or Up to 2x 3.5-inch HDDs (cold plug)

Slots

PCI-Express 3.0 x16	1 x (312 mm /) Full height (double slot density)
PCI-Express 2.0 x4 (mech. x16)	1 x (/) Low profile

Graphics on board

Shared video memory	up to 1759 MB
TFT resolution (VGA)	1024 x 768 pixel
	1280 x 1024 pixel
	1360 x 768 pixel
	1440 x 900 pixel
	1600 x 900 pixel
	1600 x 1200 pixel
	1680 x 1050 pixel
	1920 x 1080 pixel
TFT resolution (DVI)	1920 x 1200 pixel
	1360 x 768 pixel
	1440 x 900 pixel
	1600 x 900 pixel
	1680 x 1050 pixel
	1920 x 1080 pixel
Graphics features	1920 x 1200 pixel
	DirectX® 10.1 or DirectX® 11 (depending on CPU)
	HDCP support
	Open GL® 3.1 (depending on CPU)
Graphics notes	Open CL® 1.1 (depending on CPU)
	Tested resolutions, depending on display type additional resolutions and frequencies possible
	Shared memory depending on main memory size and operating system
	Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

Electrical values

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 87% / 90% / 87%
Rated voltage range	100 V - 240 V (AC Input)
Rated frequency range	47 Hz - 63 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	500 W

Noise for standard configuration (HDD, ODD)

Idle mode	39 dB(A)
Office mode	39 dB(A)

Dimensions / Weight / Environmental

Dimensions (W x D x H)	431 x 683 x 44.45 mm
Operating position	Horizontal
Weight	approx. 13 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS C620
Model	CR1U
Europe	CE Class A*
USA/Canada	FCC Class A
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL)
Japan	VCCI Class A
Russia	GOST
South Korea	KCC
China	CCC (planned)
Taiwan	BSMI
Saudi Arabia	SASO (planned)
Compliance notes	* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Security

System and BIOS Security	EraseDisk Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
User Security	User and supervisor BIOS password Hard disk password

Additional Software

Additional software (preinstalled)	Nero Essentials S (burning software) Fujitsu Recovery (hard disk based recovery) Norton Internet Security (incl. Firewall) 60 days version Microsoft Office (buy license to activate the pre-installed Microsoft Office)
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Additional Software

Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 10 Essentials XL (burning/backup/DVD-playback suite)
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Miscellaneous

Extended lifetime

Manageability

Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT Intel® Active Manageability Technology v8.0 (not activated, not set up)
Manageability software	DeskView 10.x client management including:
DeskView components	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
Manageability link	http://www.fujitsu.com/fts/manageability http://www.fujitsu.com/fts/solutions/high-tech/solutions/workplace/manageability/feature-finder.html

Input device / components

Input devices (optional)	Optical USB tilt wheel mouse Keyboard
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Warranty

Standard Warranty	3 years (depending on country)
Service level	Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Maintenance and Support Services - the perfect extension	
Recommended Service	9x5, Response Time: Next Business Day
Spare Parts availability	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

Recommended Accessories

FUTRO L420

Fujitsu FUTRO L420 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Dual-monitoring enables you to increase your productivity. As a zero client, the FUTRO L provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.

Order Code:
S26361-K1062-V200

FUTRO L620



Fujitsu FUTRO L620 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Quad-monitoring enables you to increase your productivity. As a zero client, the FUTRO L provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.

Order Code:
S26361-K1062-V300

SpaceMouse™ Pro



Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.

Order Code:
S26381-K459-L100

Wireless Keyboard Set LX900



The Wireless Keyboard LX900 is a top of the line desktop solution for lifestyle orientated customers, who want only the best for their desk. This superb keyboard set with offers ambitious users more functions, security and better features than a conventional interface device. It even includes 2.4 GHz technology and 128 AES encryption for security.

S26381-K564-L4** (**:
Country specific variation)

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu CELSIUS C620, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu CELSIUS C620, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/fts/CELSIUS

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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